

EXHIBIT A

MASTER SERVICES AGREEMENT

THIS MASTER SERVICES AGREEMENT (the "Agreement") is entered into effective as of May 30, 2017, (the "Effective Date") by and between Armstrong Telecommunications, Inc., ("Armstrong"), and CHR Solutions, Inc. ("Contractor").

WHEREAS, Contractor provides engineering, technical, construction, maintenance, and related services for its clients.

WHEREAS, Armstrong desires to have Contractor provide such services to it and its affiliates from time to time in support of certain projects.

NOW THEREFORE, in consideration of the mutual promises, covenants, and agreements contained herein, the parties hereto intending to be legally bound agree as follows:

1. SCOPE OF SERVICES.

a. Contractor will perform certain engineering, technical, construction, maintenance and related services as may be requested by Armstrong from time to time (the "Services").

b. Upon mutual execution of a Work Order substantially in the form attached hereto as Appendix A, Contractor will supply, and Armstrong will procure, the Services described therein. Each Work Order issued by Armstrong and accepted by Contractor will be governed by the provisions of this Agreement, however, in the event of a conflict between the terms of this Agreement and the terms of a given Work Order, the terms of the Work Order will control. No additional terms will apply to the Services unless mutually agreed upon between the parties in an applicable Work Order. It is specifically agreed that any preprinted terms and conditions appearing on a purchase order authorization will have no force or effect pursuant to the Services.

c. Contractor may subcontract all or a portion of the Services. Contractor will remain liable for the actions or inactions of its subcontractors. Armstrong has the right to require Contractor to remove a subcontractor from performance of the Services for any legal reason.

2. COMPENSATION.

For performance of the Services, Armstrong will pay Contractor the compensation specified in each Work Order. This compensation will be billed to Armstrong monthly. If for any reason Armstrong fails to pay Contractor in full within thirty (30) days from the date of an invoice, Armstrong will pay Contractor a late payment charge each month equal to the one and one-half percent (1.5%) of any unpaid balance.

3. REPRESENTATIVES.

Contractor will function in cooperation with, and subject always to, the direction and control of Armstrong's authorized officers or representatives designated in the applicable Work Order. Contractor will also designate a representative in each Work Order. For clarity, the foregoing sentence will not operate to make Contractor's employees joint employees of Armstrong or vice versa. Contractor and Armstrong are independent of each other and have the relationship of

independent contractors. Contractor is fully and solely responsible for its employees. Armstrong is fully and solely responsible for its employees.

4. RECORDS.

For a period of five (5) years after completion of the applicable Services, Contractor will, if requested by Armstrong, provide necessary supporting records for audit purposes with respect to the Services. Armstrong will bear all costs incurred in connection with its inspection, copying, and related audit activities. ESD, (as such term is defined in Appendix A), will have the same rights to audit or otherwise access Contractor's records as Armstrong.

5. CONFIDENTIALITY.

a. Both parties acknowledge that, in the performance of their obligations hereunder, a party (a "Receiving Party") may come into contact with Confidential Information (as defined below) of the other party (a "Disclosing Party"). A Receiving Party will not (i) use Confidential Information of a Disclosing Party for any purpose other than performing such Receiving Party's obligations hereunder and (ii) except as permitted herein, disclose or permit the disclosure of any Confidential Information of such Disclosing Party to any third party. Notwithstanding the foregoing (i) Contractor may disclose Armstrong's Confidential Information to its permitted subcontractors and / or Contractor's employees and / or the employees of Contractor's permitted subcontractors who need to know Armstrong's Confidential Information in order for Contractor to perform its obligations hereunder and who agree to receive such information subject to the confidentiality provisions of this Agreement, and (ii) Armstrong may disclose Confidential Information of Contractor as is reasonably necessary for Armstrong to adequately use and / or maintain the subject of the Services. For clarity, Armstrong's disclosure of Confidential Information to ESD will not be a breach of this Section 5. Each party will be liable for a breach of the confidentiality provisions of this Agreement by any of its respective subcontractors, employees, employees of subcontractors, and agents.

b. "Confidential Information" means any and all of a Disclosing Party's information in any form that is not generally known to third persons, including but not limited to the existence and terms and conditions of this Agreement and information relating to a Disclosing Party's: plant designs, specifications, and layouts; equipment designs; product designs and specifications; and processes, formulas, trade secrets, pricing, rates and methodologies. Except with respect to the existence and terms and conditions of this Agreement, Confidential Information does not include information that, as shown by documentary evidence, (w) is or becomes generally available or known to the public through no fault of the Receiving Party; (x) is already known by or available to the Receiving Party prior to the disclosure by the Disclosing Party; (y) is subsequently disclosed to the Receiving Party by a third party who is not under any confidentiality obligation to the Disclosing Party; or (z) has already been or are hereafter independently acquired or developed without violating any obligation that the Receiving Party has to the Disclosing Party.

6. TERMINATION.

Armstrong or Contractor may terminate this Agreement for its respective convenience by providing thirty (30) days' prior written notice to the other party; provided, however, pursuant to

such a termination, any Services to be performed pursuant to a Work Order mutually executed by the parties prior to the date of such termination must be completed pursuant to such Work Order unless the parties mutually agree otherwise. In addition to the foregoing, Armstrong may terminate any individual Work Order by providing thirty (30) days' prior written notice to Contractor, but such termination will not relieve Armstrong of its obligation to pay Contractor for expenses incurred and Services performed up to the date of termination and all reasonable expenses which Contractor incurs by reason of such termination.

7. WARRANTY.

a. Contractor warrants that its Services will be performed in accordance with professional industry standards of similarly situated businesses providing similar services. Contractor shall re-perform, at Contractor's expense, any Services performed by Contractor which have failed to meet the above warranty, if such failure is promptly reported to Contractor not later than five (5) years following completion of the applicable Services. Except for Contractor's obligation to indemnify Armstrong pursuant to Section 8 (Mutual Indemnity), which obligation is not affected by this Section 7 (Warranty), the foregoing remedy is Armstrong's sole remedy for any failure of Contractor to comply with its warranty obligations.

b. In the event that Contractor provides any equipment and / or materials pursuant to the Services, such shall be provided on an "as-is, where-is" basis, provided that Contractor will pass through any manufacturer warranties available for assignment to Armstrong with respect to any such equipment and / or materials.

8. MUTUAL INDEMNITY.

a. Armstrong agrees to indemnify, defend (but only if so elected by Contractor at its sole discretion) and hold harmless Contractor, its affiliates, joint venture partners, subsidiaries and each of their respective directors, officers, representatives, agents and employees (collectively, "Contractor Indemnified Parties"), from and against any and all proceedings, claims, demands, actions, damages, liabilities, losses, costs and expenses (including, but not limited to, reasonable attorneys' fees incurred by a Contractor Indemnified Party in defending the foregoing or incurred in enforcing Armstrong's indemnification obligations hereunder) (collectively, "Contractor Damages"), in any manner arising out of or resulting from the Services or the performance of the Services hereunder, to the extent that any such Contractor Damages are caused by any negligent acts, errors or omissions, breach of the Agreement or any willful misconduct of Armstrong, its subcontractor(s) (other than Contractor or any subcontractor or Contractor), or anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable. For the avoidance of doubt, Armstrong will not be obligated to indemnify, defend or hold harmless any Contractor Indemnified Party hereunder for that portion of any Contractor Damages resulting from the negligent acts, errors or omissions, breach of the Agreement, or willful misconduct of a Contractor Indemnified Party.

b. Contractor agrees to indemnify, defend (but only if so elected by Armstrong at its sole discretion) and hold harmless Armstrong, its affiliates, joint venture partners, subsidiaries and each of their respective directors, officers, representatives, agents and employees (collectively, "Armstrong Indemnified Parties"), from and against any and all proceedings, claims, demands,

actions, damages, liabilities, losses, costs and expenses (including, but not limited to, reasonable attorneys' fees incurred by a Armstrong Indemnified Party in defending the foregoing or incurred in enforcing Contractor's indemnification obligations hereunder) (collectively, "Armstrong Damages"), in any manner arising out of or resulting from the Services or the performance of the Services hereunder, to the extent that any such Armstrong Damages are caused by any negligent acts, errors or omissions, breach of the Agreement or any willful misconduct of Contractor, its subcontractor(s), or anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable. For the avoidance of doubt, Contractor shall not be obligated to indemnify, defend or hold harmless any Armstrong Indemnified Party hereunder for that portion of any damages resulting from the negligent acts, errors or omissions, breach of the Agreement, or willful misconduct of a Armstrong Indemnified Party.

9. LIMITATION OF LIABILITY.

Except for a breach of Section 5 (Confidentiality), neither party shall be liable, whether based on contract, tort (including negligence and strict liability), under any warranty or otherwise relating to the Services or this Agreement, for any consequential, indirect, special, punitive or incidental loss or damage.

10. TIMELINESS; FORCE MAJEURE.

a. Time is of the essence with respect to Contractor's performance of the Services. Armstrong is subject to substantial civil penalties, including, but not limited to, refunding of Grant moneys, if Armstrong does not meet certain deadlines outlined by ESD. Armstrong's ability to meet those deadlines is dependent upon Contractor meeting the deadlines outlined in the Work Order. Contractor's performance of the Services in a timely manner is a material provision of this Agreement.

b. Neither party will be considered in default in the performance of its obligations hereunder to the extent that the performance of any such obligation is prevented or delayed by any cause which is beyond the reasonable control of the affected party, such as acts of God, industrial conflicts (including without limitation, strikes, lockouts and work interruptions); government rules, regulations, suspensions or requisitions of any kind; fires; floods; unusual weather; casualties or accidents. Either party affected by a force majeure event will, upon learning of such event, give notice to the other party, stating the nature of the force majeure event, its anticipated duration, and all actions being taken to avoid or minimize its effect.

11. INSURANCE.

a. Upon execution of the Agreement, and until completion of the Services, Contractor will provide a Certificate of Liability Insurance evidencing insurance applicable to its operations as follows:

i. Workers' Compensation Insurance at statutory limits, and Employer's Liability Insurance with a limit of \$1,000,000 per accident to provide for payment to Contractor's employees employed on or in connection with the Services covered by this Agreement and / or their dependents, of Workers' Compensation benefits including, when required, Occupational

Disease benefits in accordance with the applicable law including the U.S. Longshoremen's and Harbor Workers' Compensation Act and the Jones Act.

ii. Commercial General Liability Insurance (including Premises Operations, Explosion, Collapse, Underground, Contractual Liability, Independent Contractor's Liability, broad form Property Damages including but not limited to Products / Completed Operations, Personal Injury Liability without Employment Exclusion, with a limit of \$2,000,000 each occurrence and \$2,000,000 in the aggregate, for bodily injury and / or personal injury, including death, and property damage. The Commercial General Liability Insurance will include coverage extensions to cover the indemnification obligations contained in this Agreement to the extent caused by or arising out of property damage, bodily injury, or death.

iii. Commercial Automobile Liability Insurance (including owned, non-owned and hired automobiles) with a combined single limit for bodily injury, death, and property damage of \$2,000,000 per accident. This coverage does not apply to Armstrong-furnished vehicles which are used by Contractor on a temporary or incidental basis (i.e. not permanently assigned to Contractor). On such vehicles, Armstrong shall maintain similar insurance for Contractor's benefit. The Commercial Automobile Liability Insurance will include coverage extensions to cover the indemnification obligations contained in this Agreement to the extent caused by or arising out of property damage, bodily injury, or death.

iv. Professional Liability Insurance, including, but not limited to, construction means, methods, techniques, sequences, and procedures employed in the capacity of a construction consultant, with a limit of \$1,000,000 each claim and annual aggregate if Contractor provides professional services as a part of their scope of work under any Work Order.

v. Any other insurance commonly used by Contractor for services of the type to be performed pursuant to this Agreement.

b. Contractor will pay any and all deductible and / or self-insured retentions that may apply to the required insurance. Armstrong, its directors, officers, employees, agents, and subagents, individually and collectively, will be named additional insureds on the general liability and auto liability insurance policies, but only to the extent of Contractor's Indemnity obligations. Contractor's coverage naming Armstrong as additional insured will include an endorsement specifying that Contractor's coverage is primary and non-contributory to any other coverage available to Armstrong.

c. Contractor will require all insurance policies that are in any way related to this Agreement to include clauses providing that each underwriter will waive its rights of subrogation against Armstrong. Contractor waives all rights of recovery against Armstrong which Contractor may have or acquire because of deductible clauses or inadequacy of limits of any policies. None of the requirements contained herein as to the types, limits, or Armstrong's approval of insurance coverage to be maintained by Contractor are intended to, and will not in any manner, limit, qualify, or quantify the liabilities and obligations assumed by Contractor under this Agreement, any other agreement with Armstrong, or otherwise provided by law.

d. Contractor will require all subcontractors to meet the same insurance required of the Contractor. The subcontractor's insurance must name Armstrong and Contractor as an additional insured, but only to the extent of Contractor's Indemnity obligations. Contractor will maintain each subcontractor's certificate of insurance on file and provide such information to Armstrong for review upon request.

e. Contractor must provide a certificate of insurance evidencing coverages, terms, and conditions required by this Agreement to Armstrong prior to the start of any work and thereafter upon renewal or replacement of each required insurance policy. Such policies will not be cancelled or non-renewed unless thirty (30) days (ten (10) days with respect to nonpayment of premium) prior written notice is provided to Armstrong by Contractor. Contractor will immediately notify Armstrong of any pending cancellation.

12. NOTICES.

Unless otherwise provided herein, in the event notice is required to be given to a party pursuant to any provision of this Agreement, such notice will be properly given and in full compliance with this Agreement if such notice is in writing and is delivered: (a) by an internationally recognized overnight courier, postage prepaid; (b) by personal delivery to the party; or (c) by email if promptly confirmed by first-class mail or internationally recognized overnight courier, in each case postage prepaid, to the parties at the addresses and / or numbers listed below:

If to Armstrong:	If to Contractor:
Armstrong Telecommunications, Inc. Attn: Shawn Beqaj, Vice President – Regulatory One Armstrong Place Butler, Pennsylvania 16001 Phone: 724-283-0925 Email: sbeqaj@agoc.com	CHR Solutions, Inc Attn: Victor Robles – VP Finance 9700 Bissonnet St., Suite 2800 Houston, TX 77036-8014 713.351.5138 victor.robles@chrsolutions.com
With a copy to:	With a copy to:
Armstrong Telecommunications, Inc. Attn: Legal Department One Armstrong Place Butler, Pennsylvania 16001 Phone: 724-283-0925 Email: Legal@agoc.com	CHR Solutions, Inc Attn: Mike Beecher 9700 Bissonnet St., Suite 2800 Houston, TX 77036-8014 770-331-6719 Mike.Beecher@chrsolutions.com

or at such other address or numbers as the parties may have furnished to the other in writing in accordance with this Section 12. Such notice will be deemed delivered (x) upon receipt if delivered personally, (y) on the next business day if sent by internationally recognized overnight courier, or (z) the day of sending if sent by email transmission in accordance with the terms hereof.

13. SURVIVAL.

The provisions of Sections 4, 5, 7, 8, 9, and 13 of the Agreement will survive the termination or cancellation of this Agreement and the completion of the Services performed hereunder and will remain in effect.

14. EQUAL EMPLOYMENT.

Contractor will, and will require its subcontractors to:

a. Not discriminate against any employee or applicant for employment or engagement as a contractor or subcontractor because of race, creed, religion, color, national origin, sex, sexual orientation, military status, age, disability, predisposing genetic characteristic, marital status, or domestic violence victim status.

b. Undertake, or continue any existing, equal employment opportunity programs to ensure that minority group members and women are afforded equal employment opportunities without discrimination.

c. Document its conscientious and active efforts to employ and utilize minority group members and women in its work force and make such records available to Armstrong or Armstrong's agents, at Armstrong's expense, upon Armstrong's request. Such documentation may include, among other things, a staffing plan documenting the composition of the proposed workforce to be utilized in the performance of this Agreement by categories specified by Armstrong, including ethnic background, gender, and federal occupational categories.

d. State in all solicitations or advertisements for employees, contractors, or subcontractors that all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, religion, color, national origin, sex, sexual orientation, military status, age, disability, predisposing genetic characteristic, marital status, or domestic violence victim status.

e. Request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union, or representative will not discriminate on the basis of race, creed, religion, color, national origin, sex, sexual orientation, military status, age, disability, predisposing genetic characteristic, marital status, or domestic violence victim status and that such employment agency, labor union, or representative will affirmatively cooperate in the implementation of Contractor's equal employment obligations under this Agreement.

f. Comply with the provisions of New York State Executive Law Article 15 ("Human Rights Law") and all other state and federal statutory and constitutional non-discrimination provisions, including, without limitation, the requirements of the Human Rights Law with regard to non-discrimination on the basis of prior criminal conviction and prior arrest.

g. Include paragraphs 14(a) – 14(f) in every subcontract in such a manner that the requirements of paragraphs 14(a) – 14(f) will be binding upon each subcontractor as to services provided by the subcontractor in connection with this Agreement.

Contractor's noncompliance with this Section 14 could subject Armstrong to substantial civil penalties, including, but not limited to, liquidated damages and refunding of Grant moneys. Contractor's compliance with this Section 14 is a material provision of this Agreement.

15. GOVERNING LAW.

This Agreement will be governed by and interpreted in accordance with the laws of the State of New York, excluding any State's conflicts of law principles. Both Contractor and Armstrong waive personal service of any and all process, and each consents that all service of process may be made by Registered Mail, Return Receipt Requested, directed to a party at its proper address.

16. CHANGE ORDERS.

Without invalidating the Agreement, Contractor or Armstrong may order changes in the Services required thereunder consisting of additions, deletions or other revisions, including but not limited to drawings and changes to specifications. Such party will submit a written request (each, a "Change Order") to the other party describing the nature of the proposed change(s). In the case of a Change Order initiated by Contractor, Armstrong will promptly review Contractor's proposal and notify Contractor in writing of any objections, or otherwise countersign the proposed Change Order. In the case of a Change Order initiated by Armstrong, Contractor will specify the effect, if any, that Armstrong's proposed change(s) would have on the Services, the price, the payment schedule, the completion date and any other provisions under the Agreement or Work Order. The parties will come to a mutual agreement on such proposed changes via a Change Order executed by both parties. In the event of a disagreement in the proposed change(s), either party will have the ability to terminate the applicable Work Order at issue.

17. NO THIRD-PARTY BENEFICIARIES.

Nothing in this Agreement will provide any benefit to any third party or entitle any third party to any claim, cause of action, remedy or right of any kind, it being the intent of the parties that this Agreement will not be construed as a third-party beneficiary contract.

18. SUCCESSORS AND ASSIGNS.

This Agreement will be binding upon and inure to the benefit of the parties and their respective successors and permitted assigns. No party will assign this Agreement or any of its rights or obligations hereunder without the prior written consent of the other party, which will not be unreasonably withheld; provided that a party may assign this Agreement or any portion of the Services to any of its affiliates without prior written consent from the other party.

19. INTERPRETATION AND SEVERABILITY.

Each provision of this Agreement is severable from the others. Should any provision of this Agreement be found invalid or unenforceable, such provision will be ineffective only to the extent required by law, without invalidating the remainder of such provision or the remainder of this Agreement. Further, to the extent permitted by law, any provision found invalid or unenforceable shall be deemed automatically redrawn to the extent necessary to render it valid and enforceable.

20. AMENDMENT; WAIVER.

This Agreement may be amended only by a written agreement executed by both parties. No provision of this Agreement may be waived except by an instrument signed by the party against whom the enforcement of such waiver is sought, and then only to the extent set forth in such instrument.

21. COUNTERPARTS.

This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

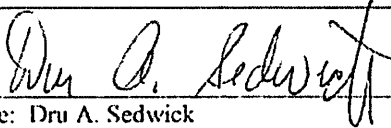
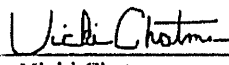
22. ENTIRE AGREEMENT.

The terms and conditions set forth herein, including Appendix A, constitute the complete statement of their agreement and all prior communications relating to the subject matter of this Agreement, whether oral or written, are hereby superseded.

23. NON-EXCLUSIVITY

Contractor may perform services the same as, or similar to, the Services for other clients. Armstrong may procure services the same as, or similar to, the Services from other contractors.

IN WITNESS WHEREOF, each of the parties has caused this Agreement to be signed by a duly authorized representative as of the Effective Date.

Armstrong Telecommunications, Inc.	CHR Solutions Inc.
By:  Name: Dru A. Sedwick Title: President	By:  Name: Vicki Chatman Title: Director, Program Management

APPENDIX A

WORK ORDER

This WORK ORDER is entered into as of May 30, 2017, by and between Armstrong Telecommunications, Inc. ("Armstrong"), and CHR Solutions, Inc., ("Contractor"), and is issued pursuant to that certain Master Services Agreement (the "Agreement") by and between Contractor and Armstrong dated as of May 30, 2017. Capitalized terms used but not defined herein will have the meaning given to them in the Agreement. This Work Order is entered into by the parties to stipulate the scope of Services to be provided by Contractor to Armstrong and the related pricing and other additional terms.

1. PROJECT:

The project ("Project") for which Armstrong is engaging Contractor to perform the Services is supported by a grant awarded to Armstrong and / or its affiliated entities (the "Grant") by New York State's Urban Development Corp. d/b/a Empire State Development ("ESD") and New NY Broadband Program.

2. SCOPE OF SERVICES:

Contractor will perform the Services listed below for Armstrong. The geographic scope of the Project is being determined by ESD in multiple phases over multiple months. When and as Armstrong moves into a geographic area granted to Armstrong by ESD, Armstrong will choose whether to perform certain work in-house or to assign the work to a contractor. If Armstrong chooses to use Contractor to perform the work, Armstrong will provide Contractor with maps showing the geographic locations in which Contractor will provide the Services.

For further details as to the scope of work, see **Outside Plant Engineering Services, Statement of Work #2506, Summary Format**, presented to Armstrong Telephone Company by Contractor, (the "Proposal").

3. SCHEDULE:

When and as Armstrong assigns work to Contractor, Armstrong and Contractor will agree on a schedule.

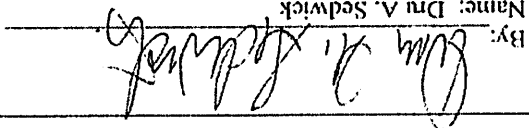
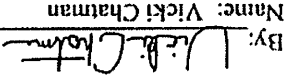
For the preliminary schedule, see [WHERE].

4. PRICING / COMPENSATION:

When and as Armstrong assigns work to Contractor, Armstrong and Contractor will agree on pricing for that work.

For the pricing for the initial assignment, see the Proposal.

5. INFORMATION TO BE FURNISHED TO CONTRACTOR BY ARMSTRONG:

Armstrong Telecommunications, Inc.	By:  Name: Dan A. Sedwick Title: President
CHR Solutions Inc.	By:  Name: Vicki Chatman Title: Director, Program Management

In WITNESS WHEREOF, each of the parties has caused this Work Order to be signed by a duly authorized representative as of the date first set forth above.

Armstrong Designated Representative: Kevin Young 724-214-6930 kyoung@agoc.com.

Contractor Designated Representative: Michael Beecher 770-331-6719
mike.beecher@chrsolutions.com.

7. DESIGNATED REPRESENTATIVES:

Contractor will provide the following information to Armstrong in connection with the Services:
See Section 2 (Scope of Services).

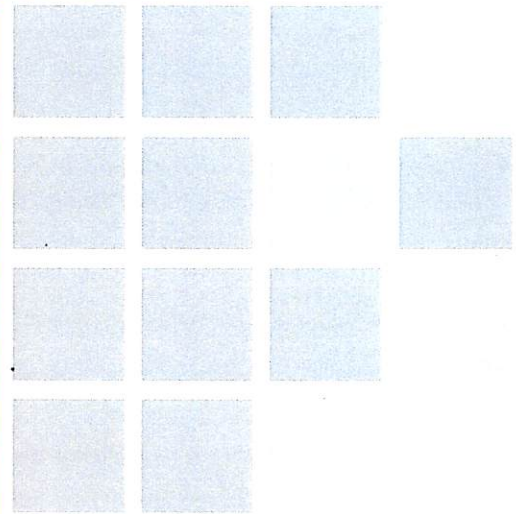
6. INFORMATION TO BE FURNISHED TO ARMSTRONG BY CONTRACTOR:

- Maps
 - Timelines
- Armstrong will provide the following information to Contractor in connection with the Services:



Outside Plant Engineering Services

Statement of Work Summary Format



Presented to: Armstrong Telephone Company

Prepared by:
Ginny Gardea
Director, Business Development & Strategy - Engineering
CHR Solutions, Inc.
SOW#: 2506



Table of Contents

Executive Overview.....	3
Scope of Work	3
OSP Design Only.....	3
OSP Engineering Staking, Detailed Design and Simple Permitting.....	3
Specialty Permitting	5
Plans and Specifications Preparation.....	5
Contract Management.....	6
Construction Management.....	7
Project Management	7
Exclusions	8
Other Terms and Conditions.....	8
Schedule 2 - Compensation	10
Unit and Fixed Pricing	10
Hourly Rates	11
Contract and Payment Terms.....	12
Signature Page	13



Executive Overview

CHR Solutions, Inc. (CHR) offers this Statement of Work (SOW) 2506 to Armstrong Telephone Company (Client) for Outside Plant (OSP) Engineering Services.

Project Mileage estimated at 2000 miles based on data provided by Client for NYB_ATI areas.

Scope of Work

OSP Design Only

CHR will complete OSP design from staking details provided by Client for that portion of the build where a third party has completed field staking.

Deliverables
Create CAD drafted construction drawings.
Prepare a splicing diagram in excel format.
Compile a list of total construction units to be used for cost estimate. <ul style="list-style-type: none"> a. Bill of Materials b. Bill of Labor
Complete As Built Designs in Load Data.

Assumption:

Simple permitting is being performed by field data collection team. Can be priced separately if needed.

OSP Engineering Staking, Detailed Design and Simple Permitting

Staking and Detailed Design will be completed by field staff and recorded on electronic staking sheets based on map data provided by Client. CHR will stake using multiple two-person crews. Additional crews may be added at the request of the Client. CHR will review the route with Client in detail to ensure that the proposed placement will meet requirements

Simple permits describes the tasks proposed to assist Client with Right-of-Way (ROW) and public permitting. CHR will secure all public permits (City, County, and State) necessary for construction including DOT right-of-way permit/design drawings. Coordination will be the key to obtaining permits. CHR will coordinate with DOT and the involved cities, counties and agencies to ensure timely approval of permits.



Deliverables
Generate a land base from existing records and aerial imagery in AutoCAD
<p>Stake and design proposed route</p> <p>Develop engineering design drawings to meet requirements set forth in the pre-staking meeting.</p> <p>Buried design includes fiber cable sizes</p> <ol style="list-style-type: none"> proposed closure locations approximated location for proposed cable estimated drop footage and location information required to complete construction <p>Aerial, staking design includes</p> <ol style="list-style-type: none"> span information pole number height of proposed attachments anchor and down guy information and requirements splice case design and attachment fiber slack coil design attachment and GPS locations any additional pole loading data as required by pole owner Tree trimming, aerial trespass issues identified
Create CAD drafted construction drawings.
Prepare a splicing diagram in excel format.
<p>Compile a list of total construction units to be used for cost estimate.</p> <ol style="list-style-type: none"> Bill of Materials Bill of Labor
Complete As Built Designs in Load Data
Identify the permits required, complete the required forms for city, county and state right of way permits and submit to Client for review, signatures and submission.
Provide management of permit process through construction completion and final inspection.



Receivables

1. Client will provide existing plant records and design maps.
2. Client will provide specific growth areas in design area.
3. CHR/Client will provide design criteria determined in a pre-design meeting.
4. Client will provide AutoCAD based map of the design area.
5. Client will provide If desired, standard drafting blocks to be used in design and staking.

Assumptions

1. Staking will be completed using standard RUS units or customer provided non-standard units.
2. Engineering design drawings will be supplied in AutoCAD format.
3. Client will provide existing facility information as required to complete the design.
4. CHR employees will check in as needed to the Client engineering office.
5. Any specialty permitting such as railroad, forest service, DNR, private easements, to scale drawings with existing facilities are price seperatly.

Specialty Permitting

This activity describes the tasks proposed to assist Client with specialty permitting such as railroad, forest service, DNR, private easements and pole attachment agreements. CHR will coordinate with permitting agencies to ensure timely approval of permits.

Deliverables
Identify the permits required, complete the required forms and submit to Client for review, signatures and submission.
Provide management of permit process through construction completion and final inspection.

Plans and Specifications Preparation

Plans and Specifications will be prepared and reviewed with the Client for approval.

Deliverable
Prepare CHR 773 OSP plans and specifications for client approval.
Provide an engineer's opinion of probable cost.

Receivables

1. Client will approve the Outside Plant design.



2. Client will approve the construction units.

Assumptions

1. Contract amendments are not included in the contract pricing and will be handled via the change management process as required.

Contract Management

CHR will provide construction contractor bid management related to 773 construction contracts.

Deliverable
Prepare a list of vendors capable of the construction project.
Conduct a pre-bid meeting.
Open the bids, check for bid accuracy and prepare a letter of recommendation.
Execute the bid process receive the secure bids, check for completeness and conduct the bid opening.
Prepare a contractor bid analysis in spreadsheet format.
Conduct a call with the Client and review results.
Provide a letter of recommendation.
Facilitate execution of the contract with the Client and the contractor.
Provide the OSP contractor with material list ("as staked" tabulations of units) for material ordering purposes.
Receive, review, and reconcile construction invoices per contract as compared to Resident Engineer As-built tabulation.
Prepare OSP construction contract close out, obtain contract signatures and lien releases.

Receivables

1. Client will provide a list of previous contractors or approve list of contractors provided by CHR.



Construction Management

CHR will provide a Resident Engineer during construction that will assist in monitoring and recording construction activities, answer contractor questions concerning the contract, tabulate units, prepare weekly progress reports, and prepare a construction discrepancy list and to make note of outstanding cleanup or hazardous conditions.

Deliverable
Provide construction oversight, and will include weekly project reporting to Client, as well as inspection phase reporting (daily inspection reports, weekly progress reports, daily cleanup notes, facility damage reports, etc). Management of the change management process.
Provide GPS of all pedestals and handholes placed by the contractor.
Submit contractors test results in spreadsheet format to Client.
Provide CAD As-Built in the appropriate format.
Notify Client to turn up facilities as routes are completed.
Participate of a final ride of the construction area with the contractor and Client. A final punch list will be prepared with a timeline for completion.
Reconcile construction units with construction vendor prior to invoice creation.

Project Management

CHR will provide project and program management services to support the Engineering Services under this SOW.

Deliverable
<ol style="list-style-type: none"> 1. Develop project governance document to include <ol style="list-style-type: none"> a. Roles and responsibilities b. High level and detailed schedules c. Budget plan to actual d. KPIs e. Project Reporting and tracking f. Change management process g. Communications process h. Risk Management Process i. Project Logistics and contacts
Project and program schedule creation, tracking and reporting.



OSP Engineering and Construction budget creation, tracking and management oversight.
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Facilitation of management and vendor status calls and communications processes (as defined in the governance plan).
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Scope, change, and escalation management.

Receivables

1. Client will provide critical engineering and construction milestones to support the program initiative.
2. Client will provide feedback and approval of the scope, schedule and reporting requirements.
3. Client will provide single point of contact to work with to acquire necessary information on internal client process requirements, costs related to the program to support budget development, and internal roles and responsibilities to support creation of the governance plan as needed.
4. Client approval of project governance plan

Exclusions

1. Identification of property owners.
2. Storm Water Pollution Prevention Plan (SWPPP).
3. Engineering of electronic equipment.
4. Assistance with material ordering.
5. Building entrance drawings.
6. Pole loading and attachment agreements

CHR can provide any of the services above on unit or hourly basis if requested.

Other Terms and Conditions

Assumptions

1. This SOW will be an Attachment to the Master Services Agreement ("Master Agreement") and as such the SOW along with the Master Agreement and its other Schedules, shall constitute all of the governing documents for such Project.
2. All pricing is outlined in Schedule 2 – Compensation ("Compensation Schedule").
3. Capitalized terms used in the Master Agreement, the Schedules and the Attachments shall have the meanings set forth in Schedule 1 – Definitions unless defined separately.
4. Client to designate a "Project Sponsor" to act as a primary liaison with CHR, responsible for coordinating access to Client stakeholders, assist CHR with collecting data, answering questions, and assist with testing for the duration of this project.
5. Client to provide access to personnel, facilities & equipment as needed to complete tasks.



Changes in Scope of Work

Any work requested by Client outside this Statement of Work or any additional work resulting from factors outside the control of CHR will be documented in a Change of Scope form pursuant to Section 2 of the Master Agreement.

Work Product and Deliverables

Work product and deliverables are subject to Section 8 of the Master Agreement. All work products will be delivered in hard copy or applicable electronic formats.



Schedule 2 - Compensation

The pricing below represents pricing for both hourly rates and unit based pricing. Unit based pricing is provided for design, staking, simple permitting and plans and specification development.

Construction Management, specialty permits, contract management, electronics site surveys and project management are provided at time and expense rates using the Hourly Rate card below.

Rates are subject to the terms and conditions of this SOW only and are not applicable to any other work, project or SOW performed by CHR for Client unless otherwise indicated. If additional resources are needed to complete the work described in this SOW, the associated rates will be negotiated as a Change in Scope.

Project Mileage estimated at 2000 miles based on data provided by Client for NYB_ATI areas.

Unit and Fixed Pricing

Task	Unit Price	Units	Total	Estimated Price/ Mile based on 2000 Miles
Design Only	\$0.18	Fl.	TBD	
OSP Staking, Engineering Design, Pole Data and Simple Permits	\$0.32	Fl. assumes 2000 miles	\$3,386,760*	\$1693
Specialty Permits	\$880.00	each	TBD	
Plans and Specifications	\$980.00	10 each*	\$9,800*	\$0.49*
Constuction Management and Inspection	rates per table below	T&E	\$1,416,732*	\$708*
Contract Management	rates per table below	T&E	\$122,260*	\$61*
Project Management	rates per table below	T&E	\$269,620*	\$135*

*Estimates based on proposed schedule and additional assumptions.



Unit and Fixed Fee Pricing will be invoiced monthly per units completed.

Hourly Rates

Description	Rate
Contract Administrator	48.00
Project Manager	85.00
CAD Technician	60.00
OSP Technician (Inspector)	45.00
OSP Engineer (Resident)	60.00
OSP Manager	75.00
Systems Technician	70.00
Systems Engineer	95.00
Professional Engineer	120.00
Director	110.00



Contract and Payment Terms

Payment is due 30 days upon receipt of monthly progress invoice according to the Master Services Agreement. Wire transfer is CHR's preferred method of payment. Bank Wiring Instructions are included below for your convenience.

CHR will invoice Client monthly for all out of pocket and 3rd party expenses incurred as needed to complete tasks including:

1. Out-of-pocket travel expenses will be billed actual as incurred without any markup.
2. Per Diem (if applicable) expenses are based on the current CONUS rate for meals and lodging without any markup.
3. Mileage is based on the current reimbursable IRS rate.

Bank Wiring Instructions

COMPANY	CHR Solutions, Inc. 9700 Bissonnet, Suite 2800 Houston, TX 77036-8014
ACCOUNT #	691-303-8276
BANK	Wells Fargo 21 Waterway #600 The Woodlands, TX 77380
ABA #	121-000-248



Signature Page

Authorized Signatures

IN WITNESS WHEREOF, the parties have executed this SOW # 2506.

Armstrong Telephone Company

Signature

Date

Printed Name

Title

CHR Solutions, Inc.

Signature

Date

Printed Name

Title